United States Department of the Interior

BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT OFFICE
3040 Biddle Road
Medford, Oregon 97504
email address: or110mb@or.blm.gov

IN REPLY REFER TO:

1792(116)
Appleseed Burning/Slashbuster EA
A6376(WHY:jl)

FEB 14 2001

Dear Interested Public:

The *Environmental Assessment* (EA) for the Appleseed Burning/Slashbuster is being advertised in the Medford Mail Tribune for a 15 day public review period. The proposed action would reduce the fire hazard (423 acres) by burning hand piles of slash created from understory reduction activities and using the slashbuster (a mechanical machine used to thin brush field vegetation). A future (approximately 3-5 years) maintenance treatments are planned utilizing a light underburn. The proposed action affects Bureau of Land Management (BLM) lands in the Middle Applegate watershed.

The primary purpose of a public review is to provide the public with an opportunity to comment on the BLM's determination that there are no significant impacts associated with the proposed action and, therefore, an environmental impact statement is not necessary.

This EA is published on the Medford District web site, www.or.blm.gov/Medford/, under "Planning Documents."

We welcome your comments on the content of the EA. We are particularly interested in comments that address one or more of the following: (1) new information that would affect the analysis, (2) possible improvements in the analysis; and (3) suggestions for improving or clarifying the proposed management direction. Specific comments are the most useful. Comments, including names and addresses, will be available for public review. Individual respondents may request confidentiality. If you wish to withhold your name and/or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

All comments should be made in writing and mailed to Lorie List or Bill Yocum, Ashland Resource Area, 3040 Biddle Road, Medford, OR 97504. Any questions should be directed to Lorie or Bill at (541) 618-2384.

Sincerely,

for Richard J. Drehobl
Field Manager
Ashland Resource Area

Enclosure (as stated)

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
ASHLAND RESOURCE AREA

ENVIRONMENTAL ASSESSMENT

FOR

APPLESEED BURNING/SLASHBUSTER

EA No. OR-110-01-005

This environmental assessment (EA) for the proposed Appleseed Burning/Slashbuster EA was prepared utilizing a systematic interdisciplinary approach integrating the natural and social sciences and the environmental design arts with planning and decision making.

for

Richard J. Drehobl, Ashland Field Manager

02-14-01
Date

Richard J. Drehobl, Ashland Field Manager Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASHLAND RESOURCE AREA

EA COVER SHEET

Project Name/Number: APPLESEED BURNING/SLASHBUSTER EA/OR-110-01-005

Location: Ashland Resource Area

Specialist	**Title**	**Resource Value**
Scott Haupt	Forester	Silviculture
Luis Ramirez	Forestry Technician	Implementation
Dan Dammann	Soil Scientist	Soils & Water
Victoria Arthur	Wildlife Biologist	Wildlife, T&E Animals
Greg Chandler	Fuels Mgt. Specialist	Fire Hazard Reduction
Mark Steiger	Botanist	S&M/T&E Plants
Fred Tomlins	Recreation Specialist	Cultural Resources
Jeannine Rossa	Fisheries Biologist	Aquatic
Bill Yocum	Environmental Planner/Coord.	Format/Adequacy

ASHLAND RESOURCE AREA - APPLESEED MAINTENANCE

TABLE OF CONTENTS

Environmental Assessment
for
Appleseed Burning/Slashbuster

CHAPTER 1

A. INTRODUCTION

The Bureau of Land Management (BLM) proposes to; 1) burn handpiles from previous understory reduction activities and 2) mechanically (slashbuster) thin two brushfields in the Middle Applegate Watershed. The Appleseed Burning/Slashbuster encompasses approximately 423 acres of BLM administered lands. All planned activities are located on public lands administered by the BLM. (See Appendix A for Location Map).

This document complies with the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA; 40 CFR Parts 1500-1508) and the Department of the Interior's manual guidance on the National Environmental Policy Act of 1969 (516 DM 1-7).

B. PURPOSE AND NEED

The interagency *Applegate Adaptive Management Area (AMA) Ecosystem Health assessment* classified the AMA as having a high fire risk and fire hazard. This assessment recommends reducing fire risk and hazard at a broad scale, utilizing density management, prescribed fire, and manual manipulation of live and dead vegetation. Several fuel management strategies are used when reducing fire risk and hazard at a broad scale. One strategy is to reduce ladder and surface fuels on forest and non-forest lands.

The project areas are forest stands of all ages and sizes. Douglas-fir and some Pacific Madrone are the predominant overstory species with scattered sugar and ponderosa pine. Pacific madrone, California black oak and Canyon live oak are the predominant hardwoods. As a result of the absence of wildfire, stands have seeded in naturally, creating high tree density levels. Dense patches of non-commercial size conifers were thinned, along with small hardwoods and shrubs with the objectives of improving vigor of the residual trees and reducing fire hazard by reducing understory "ladder fuels". The woody material created from the operation was then handpiled. Any handpile adjacent to a road was available for firewood removal.

Two alternatives were developed for this project. A description of these alternatives can be found in Chapter II of this document.

C. CONFORMANCE WITH EXISTING LAND USE PLANS

The proposed activities are in conformance with and tiered to the *Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other*

Mitigation Measures Standards and Guidelines (USDI, USDA 2001) and the *Medford District Record of Decision and Resource Management Plan* (RMP) (USDI 1995b). These Resource Management Plans incorporates the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (NWFP) (USDA and USDI 1994). These documents are available at the Medford BLM office and the Medford BLM web site at <http://www.or.blm.gov/Medford/>.

E. RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS

The proposed action and alternatives are in conformance with the direction given for the management of public lands in the Medford District by the Oregon and California Lands Act of 1937 (O&C Act) and the Federal Land Policy and Management Act of 1976 (FLPMA).

F. DECISIONS TO BE MADE ON THIS ANALYSIS

This environmental assessment (EA) is being prepared to determine if the proposed action and any of the alternatives would have a significant effect on the human environment thus requiring the preparation of an environmental impact statement (EIS) as prescribed in the National Environmental Policy Act of 1969. It is also being used to inform interested parties of the anticipated impacts and provide them with an opportunity to comment on the various alternatives.

The Ashland Resource Area Field Manager must decide:

- Whether or not the impacts of the proposed action are significant to the human environment beyond those impacts addressed in previous NEPA documents. (If the impacts are determined to be insignificant, then a Finding of No Significant Impact (FONSI) can be issued and a decision can be implemented. If any impacts are determined to be significant to the human environment, then an Environmental Impact Statement must be prepared before the Manager makes a decision.)
- Whether to implement the proposed action alternative or defer to the no action alternative

G. ISSUES OF CONCERN

The following issues were identified during the scoping process. All issues were reviewed by the Interdisciplinary Team. Issues that directly relate to the proposed action were analyzed in detail.

- Past understory reduction activities of vegetation created high surface fuel loadings. In order to reduce the high fire hazard that exists in these units, the slash was hand piled in preparation for burning. The hand piling of this slash has changed the continuity of fuel within these units, but a high fire hazard still exists.
- Disturbance to NWFP Survey and Manage species in treatment units.
- Disturbance to nesting birds and other wildlife during the spring reproductive period.
- Disturbance to nearby nesting northern spotted owl sites.
- The spread of noxious weeds.

CHAPTER 2
Alternatives

A. INTRODUCTION
This chapter describes the proposed action alternative and the no action alternative. This chapter also outlines specific project mitigation features that are an essential part of the project design.

The Ashland Resource Area has developed a proposed action designed with the project objective outlined in the Middle Applegate Watershed Analysis (page 88) and in accordance with the best management practices as outlined in the Medford District RMP (pages 149-177).

B. PROPOSED ACTION ALTERNATIVE - Reduce the fire hazard by burning hand piles of slash created from understory reduction activities and using the slashbuster. Maximum slope for slashbuster operations is 50% with unit slopes having an average less than 35% . A future (approximately 3-5 years) maintenance treatments are planned utilizing a light underburn.

Unit Name	Acres	Proposed Treatment	Location
Appleseed 3-003	180	Handpile Burn	T37S,R4W, Section 3
Appleseed #6	99	Slashbuster	T38S,R3W, Section 21
Appleseed #5	49	Slashbuster	T38S,R3W, Sections 21 & 22
Appleseed 33-005	21	Handpile Burn	T38S,R4W, Section 33
Chapman Keeler #12	36	Handpile Burn	T38S,R4W, Section 35
Appleseed #35-097	14	Handpile Burn	T38S,R4W, Section 35
Chapman Keeler #4	24	Handpile Burn	T39S,R4W, Section 1
Total Acres	423		

Location map is located in Appendix A

This proposed action alternative includes project design features (PDFs). Listed below are PDFs that are included for the purpose of mitigating, reducing, or eliminating anticipated adverse environmental impacts. Analysis supporting the inclusion of PDFs can be found in the RMP: Best Management Practices and the Middle Applegate Watershed Analysis.

Do not burn any hand piles which are:

- located on draw bottoms.
- on the first 50 feet of skid trails adjoining the BLM road system.

Cypripedium fasciculatum: Two occurrences of this species are known from Appleseed Unit# 3-003 and one each from Appleseed Unit# 33-005 and Chapman Keeler# 4. In order to reduce fire intensity

and minimize potential damage to all of the sites, the handpiles should be burned at the lower end of the prescription plan.

Mimulus bolanderi: The two known occurrences within the Appleseed #5 unit are located in gravelly soil in wedgeleaf ceanothus (*Ceanothus cuneatus*) chaparral. The two known occurrences of the Bureau "assessment" species *Mimulus bolanderi* and the one known occurrence of the Bureau "assessment" species *Pellaea mucronata var mucronata* would be buffered with a 100-150 ft. variable radius buffer. This buffering provides protection from physical disturbance and microclimate alterations.

Prescribed burning operations would follow all requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality Air Quality and Visibility Protection Program. Burning operations would be postponed if Medford or Grants Pass are under a "yellow" or "red" wood burning advisory.

Measures to reduce the potential level of smoke emissions from proposed burn sites would include:

- completing mop-up as soon as practical.
- covering hand piles to permit burning during the rainy season. Burning during the rainy season allows for better smoke dispersion because there is a stronger possibility of atmospheric mixing and/or scrubbing. Covering of piles also ensures lower fuel moisture in the fuels to facilitate their quick and complete combustion.

A general recommendation to protect Special Status Species, as well as other nesting bird and wildlife species, is not to burn the piles during the height of the spring reproductive period of April 1st through June 30th.

Piles would be burned in a matter as to keep residual tree mortality at a minimal level.

In slashbuster units (Appleseed 5 & 6) reserve all overstory hardwood trees.

In the Slashbuster Unit Appleseed #6, the Riparian Reserve below the jeep road would not be thinned (from a point where the jeep road starts on China Gulch Road to where the jeep road crosses the stream).

In the Slashbuster Units Appleseed #6, above where the jeep road crosses the Riparian Reserve, all madrone trees would be left in the Riparian Reserve. Other vegetation would be thinned to 25' on either side of the intermittent draw.

Star thistle populations exist along the road prism adjacent to the slashbuster units. Measures to reduce the spread of star thistle in these units (Appleseed 5 & 6) would include:

- Minimize the number of entry and exit locations in the units.
- Entry and exit locations would only be used when the soil surface is dry.

- Multiple treatments with herbicides (as outlined in the Medford District's Integrated Weed Management Plan and EA #OR-110-98-14).
- Seed with native grasses where bare ground is exposed from slashbuster, spraying, and/or burning operations.

C. NO ACTION ALTERNATIVE - Leave the hand piles as is and do not burn them. Do not thin the planned slashbuster units. The high fire hazard would remain unchanged for period of up to ten years and then most likely increase as a result of growth from the understory. Maintenance broadcast burning would not occur as the high amount of ground fuel could create unacceptable resource damage.

CHAPTER 3
AFFECTED ENVIRONMENT

A. SPECIAL STATUS SPECIES

All of the proposed activity areas were surveyed for Bureau Special Status and Survey and Manage vascular plants as well as the federally listed Fritillaria gentneri during the 1998 field season by qualified botany contractors. No populations of Fritillaria gentneri were located during the course of the surveys. Surveys documented four occurrences of the Bureau "sensitive" and Survey and Manage category 1C species Cypripedium fasciculatum, two occurrences of the Bureau "assessment" species Mimulus bolanderi, and one occurrence of the Bureau "assessment" species Pellaea mucronata var. mucronata.

Cypripedium fasciculatum: is a slow-growing, long-lived orchid with a mycorrhizal association and an arguable dependence on fire. Mid to late successional forests with canopy closures greater than 60% appear to be the optimum habitat for this species. Two occurrences of this species are known from Appleseed Unit# 3-003 and one each from Appleseed Unit# 33-005 and Chapman Keeler Unit#4. These occurrences were originally buffered with a variable radius buffer. Handpiles were unknowingly created within the buffered zones. The handpiles were disassembled and scattered in mid January 2001. Surveys were conducted in 1999 and 2000 to try and relocate the two previously known occurrences from the Appleseed 3-003 unit. Both surveys failed to relocate the *Cypripedium fasciculatum* sites. In order to reduce fire intensity and minimize potential damage to all of the sites, the handpiles should be burned at the lower end of the prescription plan.

Mimulus bolanderi: The two known occurrences within the Appleseed #5 unit are located in gravelly soil in wedgeleaf ceanothus (*Ceanothus cuneatus*) chaparral.

Pellaea mucronata var mucronata: is a fern that occurs in California, Nevada, and Oregon. There are only three known sites in Oregon and all of these are located on the Medford District. The one known occurrence in the project area is located on the eastern edge of the Chapman Keeler #4 unit, on a slatey to gravelly low rock outcrop, in a small white oak woodland opening near the edge of a mixed evergreen forest.

B. SURVEY AND MANAGE SPECIES

All of the proposed activity areas were surveyed for the presence of Special Status and Survey and Manage Strategy 1A, 1B, 1C, and 1D fungi, lichens, and bryophytes in the fall of 2000 in accordance with established protocols. No Bureau Special Status or Survey and Manage Srategy 1A, 1B, 1C, or 1D fungi, lichens, and bryophytes were located.

C. RED TREE VOLE

Surveys in the project area have not located any red tree vole nests. If any nests are located, they would be protected as outlined in BLM-Instruction Memorandum No. OR-97-009, Interim Guidance for Survey and Manage Component 2 Species: Red Tree Vole, dated 11/4/96.

D. SISKIYOU MOUNTAINS SALAMANDER

Surveys have located Siskiyou mountains salamanders in areas adjacent to the project areas. Siskiyou mountains salamander habitat has been designated as no-treatment as outlined in the Forest Plan management guidelines.

E. MOLLUSCS

Surveys in the project area have not located any Survey and Manage mollusc species listed in the Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer and other Mitigation Measures Standards and Guidelines, dated 1/01. If any survey and manage species are found, the Management Recommendations for Survey and Manage Terrestrial Mollusks, version 2.0, dated, Oct., 1999 would be implemented in this project in order to maintain microsite conditions and protect mollusc populations.

F. GREAT GRAY OWL

Surveys for great gray owls have not located any nest sites in the project area. If any nests are found, they would each receive 100 acre no-treatment buffers, in accordance with the Northwest Forest Plan Record of Decision and the BLM Resource Management Plan guidelines.

G. NORTHERN SPOTTED OWL

The northern spotted owl is listed as a threatened species under the auspices of the Endangered Species Act of 1973, as amended. BLM is required to formally consult with the U.S. Fish and Wildlife Service on actions that would adversely affect northern spotted owls.

Formal programmatic consultation with the U.S. Fish and Wildlife Service has been completed for Burning/Slashbusters including pre-commercial thinning and pile burning in project areas during fiscal years 1997 through 2005 [Biological Opinion 1-7-96-F-392 (BO)]. The mandatory terms and conditions of the BO require the implementation of project design criteria proposed in the Biological Assessment for Rogue River/South Coast FY 97/98 Timber Sale Projects (BA). These criteria would be incorporated in the design of this project . The BA and BO are available for review at the Medford BLM Office.

H. FEDERALLY LISTED PLANTS

There would be no affect to any Federally listed plants species, as suitable habitat or occurrences does not exist within the area.

I. FISH

The project units are scattered throughout the Middle Applegate subwatershed. None of the units are near fish-bearing streams.

Table: Location of each project unit relative to fish species and habitat.

Unit location	Watershed name	Distance (approximate miles) from listed or candidate fish (coho and steelhead)
Handpile Burning Units:		
38s4w35	Keeler	2 miles from coho and steelhead in Applegate River
38s4w35	Keeler	2 miles from coho and steelhead in Applegate River
39s4w1	Chapman	½ mile from cutthroat in Chapman Creek; 2 ½ miles from Applegate River
37s4w33	Slagle	1 ½ miles from cutthroat and steelhead habitat on Slagle Creek (unknown whether fish actually using upper Slagle Creek, because habitat in Slagle Creek is extremely poor); 3 miles from coho in Applegate River.
37s4w3	Humbug	1 mile from cutthroat in Humbug Creek; 2 miles from steelhead in Humbug Creek; 3 ½ miles from coho in Applegate River.
Slashbuster Units:		
38s3w21	China Gulch	1 ½ miles to coho and steelhead in Applegate River
38s3w22	China Gulch	1 ½ miles to coho and steelhead in Applegate River

All of the units contain small intermittent (dry in the summer) or perennial streams. Of the streams to the north of the Applegate River (in the Humbug, Slagle, and China drainages), the functioning riparian areas tend to be narrow (Middle Applegate Watershed Analysis, 1995). Riparian vegetation communities are usually simplistic, consisting of dryland vegetation like oaks, manzanita, and poison oak. The streams to the south (Chapman and Keeler drainages), tend to have more diverse riparian vegetation, more perennial water, and consequently a wider variety of aquatic species. For example, Pacific giant salamanders are found in mainstem Chapman and Keeler Creeks, but not in Slagle, Humbug, or China Gulch (BLM, unpublished survey data).

Handpile Units:
Brush and small trees were thinned within the Riparian Reserves of all the units to try to encourage the remaining trees to grow bigger, faster. When combined with prescribed burning, the primary objective was to try to create stands that resemble pre-fire suppression conditions. Most importantly for Riparian Reserves, biologists felt that encouraging the development of larger trees in some areas would improve the long-term capability of these areas to support animals dependant on large-diameter snags, and large-diameter rotting logs.

Therefore, under the proposed action, there are handpiles within the Riparian Reserves that would be burned under the proposed action. None of the handpiles should be closer than 25' to the edge of an intermittent or perennial stream. A January field inspection in the Chapman Creek unit found that all the observed handpiles were at least 25' from any stream bank. Most importantly, the duff, litter, sticks and forbs between the piles and the stream bank were thickly layered.

Slashbuster Units:

In the Slashbuster units in China Gulch, the intermittent stream that runs through the unit has been impacted by a failed research project to convert brushlands to conifer stands. Some of the Riparian Reserve is now conifer plantation. Another portion is a small oak stand, evidently important for a variety of wildlife species (Fig. X1). Most of the Riparian Reserve vegetation, however, is 100% overgrown *Ceanothus*, that sprouted after a large forest fire in the 1940's (B. Pasely, personal communication) (Fig. X2).

Figure X1: Oak-dominated Riparian Reserve along intermittent tributary of China Gulch.

Figure X2: Ceanothus and medusahead-dominated Riparian Reserve along intermittent tributary of China Gulch.

None of the streams in the project area are listed by the Department of Environmental Quality as "water quality limited." The Applegate River, which runs through the middle of the valley, is listed on the 303(d) list as water quality limited for temperature and flow modification. Refer to the Department of Water Quality's website for more information: http://waterquality.deq.state.or.us/wq/303dlist/303dpage.htm.

CHAPTER 4
Environmental Consequences

A. CRITICAL ELEMENTS
The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be considered in all EA's.

Table 12: Critical Elements

Critical Element	Affected Yes	Affected No	Critical Element	Affected Yes	Affected No
Air Quality		✔ **	T & E Species		✔
ACECs		✔	Wastes, Hazardous/Solid		✔
Cultural Resources		✔	Water Quality		✔ **
Farmlands, Prime/Unique		✔	Wetlands/Riparian Zones		✔ **
Floodplains		✔	Wild & Scenic Rivers		✔
Nat. Amer. Rel. Concerns		✔	Wilderness		✔
Invasive, Nonnative Species		✔**	Environmental Justice		✔

**These affected critical elements would be impacted by implementing the proposed action. The impacts are being reduced by designing the proposed action with Best Management Practices, Management Action/Direction, Standard and Guidelines as outlined in the Environmental Impact Statements (EIS)/Record of Decisions *(RMP) (USDI BLM 1995)(USDA FS; USDI BLM 1994*) tiered to in Chapter 1. The impacts are not affected beyond those already analyzed by the above mentioned documents.

Only substantive site specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this document. If an ecological component is not discussed, it should be assumed that the resource specialists have considered effects to that component and found the proposed action or alternatives would have minimal or no effects. General or "typical" effects from projects similar in nature to the proposed action alternative are also described in the documents to which this plan is tiered.

B. AIR QUALITY

The effect of smoke produced from prescribed burning could reduce visibility within the project area or could concentrate the smoke around the project site or surrounding drainages. Prescribed burning could have a notable effect on local and downwind air quality. Air quality of local communities could be impacted for brief periods of time due to prescribed burning.

All burning would be done in accordance with the Oregon Smoke Management Plan which tries to prevent prescribed fire smoke from being carried to or accumulating in designated smoke-sensitive areas. The proposed action is in conformance with federal air quality and visibility requirements to protect public health and encourage the reduction of emissions.

C. WILDLIFE

Effects of the Proposed Action Alternative

Treatments such as pre-commercial thinning, slashbuster, and pile burning are designed to promote forest health and are expected to benefit some wildlife species by restoring these stands to historic habitat conditions.

Threatened/Endangered Species - Northern Spotted Owl

The northern spotted owl is listed as a threatened species under the auspices of the Endangered Species Act of 1973, as amended. BLM is required to formally consult with the U.S. Fish and Wildlife Service on actions that would adversely affect northern spotted owls.

No large-scale change in northern spotted owl habitat function is expected due to the pile burning and mechanical slashbuster treatments proposed in this project.

Formal programmatic consultation with the U.S. Fish and Wildlife Service has been completed for maintenance projects including pre-commercial thinning and pile burning in project areas during fiscal years 1997 through 2005 [Biological Opinion 1-7-96-F-392 (BO)]. The mandatory terms and conditions of the BO require the implementation of project design criteria proposed in the Biological Assessment for Rogue River/South Coast FY 97/98 Timber Sale Projects (BA). These criteria would be incorporated in the design of this project . The BA and BO are available for review at the Medford BLM Office.

Project design criteria that would apply to this project to protect northern spotted owls:

1. Known active northern spotted owl nest sites need to be protected from fire.
2. A seasonal restriction on burning between March 1st and July 15th would be place within 0.25 mile of known active northern spotted owl nests.

Northern Spotted Owl Critical Habitat Unit (CHU)

Approximately 74 acres of the project area are in CHU OR-74. No large-scale change in northern spotted owl CHU function is expected due to the slashbuster treatment and pile burning proposed in this project.

Special Status Species
No large-scale change in habitat function or other detrimental effects are expected for any Special Status Species due to the treatments proposed in this project.

Survey and Manage Species
No large-scale change in habitat function or other detrimental effects are expected for any Survey and Manage species due to the treatments proposed in this project.

D. BOTANY
Effects of the Proposed Action Alternative
The Federally listed *Fritillaria gentneri* is not known to occur within the confines of the "Appleseed Burning/Slashbuster" units and the proposed action would have no affect on the continued persistence of this species within its known range.

Under the Action Alternative, there would be no direct effects to the *Cypripedium fasciculatum, Mimulus bolanderi, or Pellaea mucronata var mucronata* populations.

Indirect and cumulative effects would continue the persistence of these species. Handpile burning would help reduce ground fuels and minimize the possibility of an intense ground fire that could be detrimental or catastrophic to the continued persistence of these species on the site.

The action alternative would have no affect on the continued persistence of any Special Status or Survey and Manage Strategy 1A, 1B, 1C, or 1D fungi, lichen, or bryophyte species.

Noxious weeds, especially yellow star-thistle *(Centaurea solstitialis),* are present within the project area and can out-compete the native flora, and rare plants, for water, light, and space. Vehicular and foot traffic through existing weed populations helps to spread weed seeds throughout the area. Through time, the indirect affect of noxious weeds in habitat and plant communities containing Bureau Special Status Plants and Survey and Manage Plants would be detrimental.

Effects of the No Action Alternative
The no action alternative would have no direct affect on the continued persistence of *Cypripedium fasciculatum, Mimulus Bolanderi,* or *Pellaea mucronata var. mucronata* on the site. Detrimental indirect and cumulative effects might result if natural revegetation of the site is allowed to continue unchecked in the absence of fire. The resulting accumulation of fuels on the forest floor would greatly increase the possibility of an intense ground fire which could completely eliminate any of these species from the site. However, low intensity ground fire is thought to be beneficial to the continued health and vigor of at least one of these species (*Cypripedium fasciculatum*).

The no action alternative would have no affect on the continued persistence of any Special Status or Survey and Manage Strategy 1A, 1B, 1C, or 1D fungi, lichen, or bryophyte species.

At least one noxious weed species, yellow star-thistle (*Centaurea solstitialis*), is known to occur within the project area in open disturbed sites. Noxious weeds can out-compte the native flora, and rare plants, for water, light and space. If left un-treated, noxious weeds can reduce habitat suitability for the Bureau Special Status plants adapted to those habitats. With the no action alternative, noxious weeds would continue to spread.

E. FISH

Effects of the Proposed Action Alternative

It is very unlikely that burning the handpiles that are within Riparian Reserves would contribute any sediment to the small intermittent (dry in the summer and fall) and perennial streams within the units. The 25' "no burn" buffers would ensure that any open areas of ash or soil would be unable to cause erosion. For example, duff and ground vegetation are so thick on the Chapman/Keeler units that there is no pathway for any sediment to reach the stream (Fig. X3). Therefore, there is a less than negligible chance of negatively affecting water quality for coho salmon, steelhead, or other fishes and aquatic animals. In addition, the piles should not contribute any sediment above natural background levels. Normally, these riparian systems (especially the Humbug and Slagle Creek units) would burn occasionally, contributing nutrients, ash, and sediment until the landscape healed the following spring. Burning piles of brush underneath the canopy with intact duff and litter layers between the piles and any stream channel would not even reach the level of a prescribed burn. Due to the location of the units, Riparian Reserves on fish-bearing streams would not be affected.

In the larger landscape, burning the handpiles should reduce fuels in the units. If so, then wildfires that would occur in the future would be more likely to be a more natural, patchy ground burn, with a restorative effect on the Riparian Reserves (healthier and more diverse plant communities, increased food and nutrient abundance for wildlife, birds and aquatic animals, etc.)

Figure X3: Example of thick duff, litter, and vegetation on ground around handpile unit in Chapman Creek.

Effects of the No Action Alternative

No change in the Riparian Reserve condition would occur. Some fuel hazard reduction has already been achieved by handpiling the brush thinnings. However, it is unlikely that leaving the piles unburned would cause any impacts to listed fishes, their habitat, or Riparian Reserves.

Slashbuster/Prescribed burning:

No change in Riparian Reserve condition would occur. Wildfire risk would remain high. Due to the thick Ceanothus cover in the Riparian Reserve, it is likely that a wildfire would severely burn most of the vegetation in the Riparian Reserve. This would eliminate woody debris and litter, leaving nothing to stop soil erosion from the winter rains. Depending on the fire's severity and the length of winter storms, soil erosion may or may not impact listed fish downstream in the Applegate River. Normally, a stream like China Gulch could attenuate such sediment impacts, but because China Gulch has been altered by mining and other human activities, the sediment would probably just shoot downstream to the river.

NMFS Consultation

Normally, a project of this nature is a "May Affect, *Not* Likely to Adversely Affect" action. This means that it has a less than negligible chance of negatively affecting listed fish or their critical habitat. However, the National Marine Fisheries Service (NMFS) has already issued "take" permits for burning handpiles and mechanical brush thinning in Riparian Reserves, assuming the worst effects possible. Therefore, even though these actions are very unlikely to cause "take," this project is covered by the Biological Opinion (B.O.) of August XX, 1997. For more information on NMFS and fisheries consultation, visit the NMFS web page at http://www.nwr.noaa.gov.

CHAPTER 5
List of Agencies and Persons Consulted

A. SUMMARY OF PUBLIC INVOLVEMENT

Scoping for this project began in 1997 when BLM began the process of planning restoration projects across a large portion of the Middle Applegate Watershed. BLM evaluated land, vegetation, and stream conditions and developed a plan that included thinning forests and brushlands, reintroducing prescribed fire, and reducing sediment impacts to streams. This large landscape plan was called the "Appleseed Project." In May 1999, the Appleseed Environmental Assessment (EA) was released for public review. Many Applegate residents and others took the time to write lengthy critiques of the project and the EA. A common theme was that the scope of the project was too large, making it difficult for local residents to understand what was happening on public land. In order to better explain the proposed project actions, this EA analyzes a small portion of the larger Appleseed project. Upon completion of this EA, a legal notification was placed in the Medford Mail Tribune offering a 30-day public review and comment period. For additional information, please cont Bill Yocum or Lorie List at (541)618-2384.

B. DISTRIBUTION LIST AND AVAILABILITY ON THE INTERNET

This EA was distributed to the following agencies and organizations.

ORGANIZATIONS

Applegate River Watershed Council
Audubon Society
Klamath Siskiyou Wildlands Center
Headwaters
Oregon Natural Resource Council
The Pacific Rivers Council
Rogue Group of Sierra Club
Association of O&C Counties
Southern Oregon Timber Industry Assoc.
Southern Oregon University

TRIBES

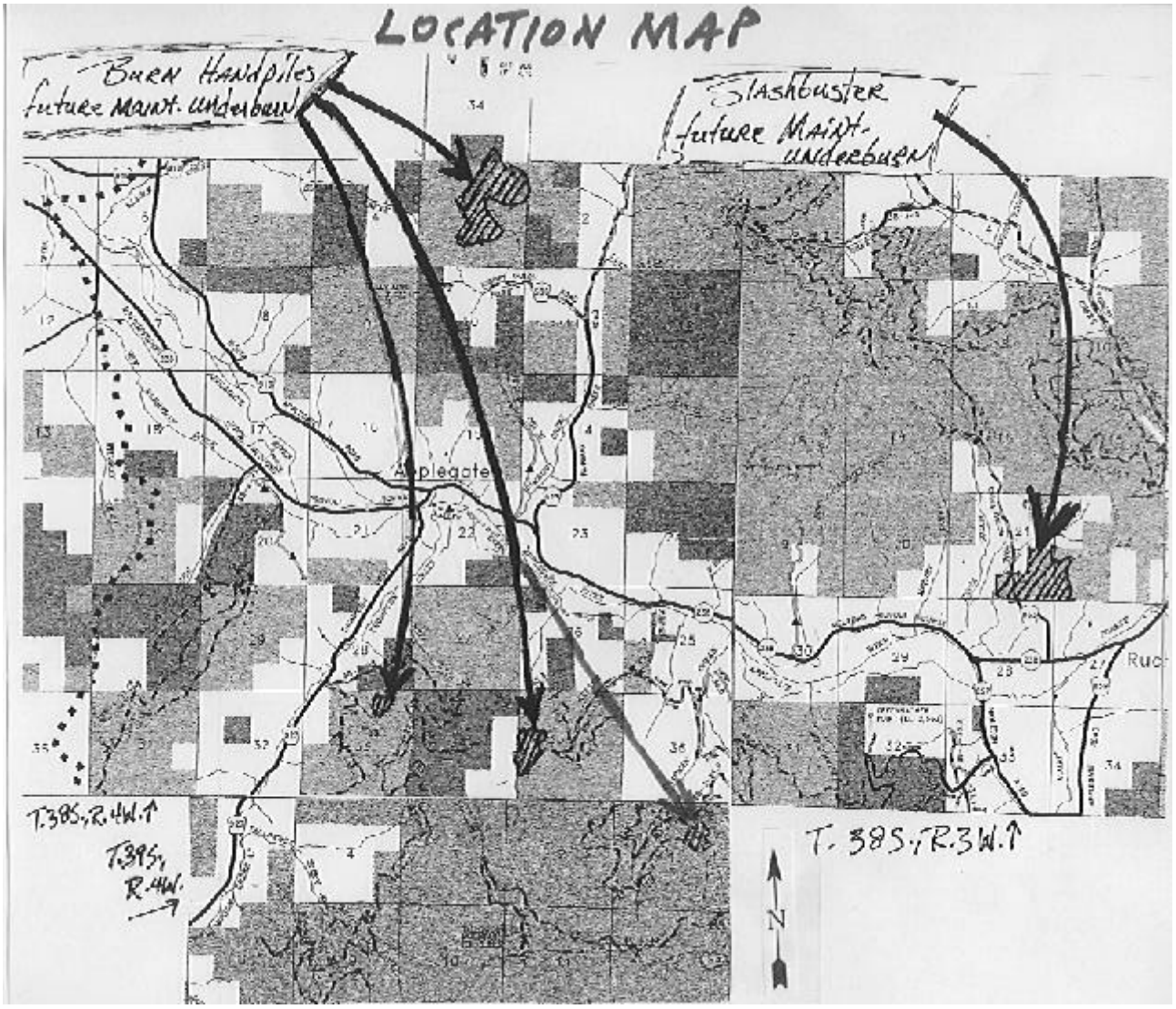
The Confederated Tribes
Cow Creek Band of Umpqua Indians
Confederated Tribes of Grand Ronde
Confederated Tribes of Siletz
Klamath Tribe
Quartz Valley Indian Reservation
Shasta Nation
Confederated Bands [Shasta]
Shasta Upper Klamath Indians
Confederated Tribes of the Rogue-table Rock and Associated Tribes

AGENCIES CONSULTED

A. Federal Agencies
- U.S. Fish and Wildlife Service
- U.S. National Marine Fisheries Service
- Rogue River National Forest

B.State and Local Agencies
- Oregon Department of Fish & Wildlife
- Oregon Department Forestry
- Jackson Co. Commissioners

Appendix A


LOCATION MAP
Buen Handpiles
future maint. underburn
Slashbuster
future maint.
underburn
Applegate
T.38S.,R.4W.↑
T.39S.,
R.4W.→
T. 38S.,R.3W.↑
N